

## City of Newport Beach - Building Department

### ADMINISTRATIVE POLICY

Effective Date	Subject	Policy No.
April 12, 2010	Solar Photo-Voltaic System	ADMIN 12

In order to facilitate the increased demand for installation of solar photo-voltaic systems over single-family dwellings, the Building Department has provided a guideline for installation of small systems for generating 3 KW without providing vertical and lateral analysis. Existing dwellings which have not been reroofed with heavier roofing material are allowed to install bigger systems proportionate to the surface area of the roof without structural analysis.

In addition, the guideline requires minimum electrical design information on the drawings to verify the safety of the design due to the high voltage generated by the system.

Attachment

  
Jay Elbettar, Building Director



# CITY OF NEWPORT BEACH

## BUILDING DEPARTMENT

3300 NEWPORT BLVD.  
P.O. BOX 1768, NEWPORT BEACH, CA 92658  
(949) 644-3275

### SOLAR PHOTO-VOLTAIC SYSTEM OVER SINGLE FAMILY DWELLING SUBMITTAL REQUIREMENTS

#### ADMINISTRATIVE

1. Provide (4) sets of plans minimum sheet size 18" x 24"
2. Attach all manufacturer specification sheets, installation instructions and U.L. listings to the plans
3. Plans are to be signed by State of California licensed contractor with any of the following classifications "A", "B", "C-46", "C-10", or licensed electrical engineer. Provide signature and contractor license number on each sheet

#### ROOF PLAN

4. Provide a roof plan projected on a site plan. Show the location and dimensions of all solar voltaic equipment and PV arrays
5. Provide a partial roof framing plan. Show new and existing supporting rafters, beams and headers include rafter size, span, and spacing. Identify roof sheathing and roofing materials

ALTERNATE: Framing information is not required if arrays are supported at a maximum spacing of 4 ft.

6. Detail equipment support connections to roof. Provide a detail for flashing and water proofing at system supports
7. Provide calculations by a licensed professional engineer or architect to verify supporting members are adequate for existing and proposed loads

ALTERNATE: Calculations not required if arrays are supported at a maximum spacing of 4 ft.

8. Provide lateral calculations by a licensed professional engineer or architect per 2007 C.B.C. showing that affected existing lateral resisting elements are no more than 10% overstressed according to the 2007 CBC.

ALTERNATE:

- a. Lateral analysis is not required if total area of arrays is less than 250 sq. ft. over a second story roof or 350 sq. ft. over a first story roof.
- b. Weight of system does not exceed 1 lb. x entire area of roof on which panels are located, provided the house has not been previously reroofed with roofing material heavier than the original roofing material. Applicant shall research permit records.

#### ELECTRICAL

9. Provide Electrical drawings to show compliance with the applicable provisions of the 2007 California Electrical Code